

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Worden-Ballantine Water & Sewer District.
PO Box 217
Worden, MT 59088
2. Type of action: Application for Beneficial Water Use 43Q 30022352
3. Water source name: Ground Water
4. Location affected by project: A well in the SW, SW SE of Section 31, Township 3 North, Range 29 East in Yellowstone County.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Worden-Ballantine Water & Sewer District has developed a well 32 feet deep that will pump 60 gallons per minute with a maximum volume of 50 acre feet per year to serve as a back up water supply for the Ballantine and Worden municipalities during peak usage. The DNRC shall issue a water use permit only if an applicant proves the criteria in 85-2-311 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)

Species Impact Information
Cultural Resource Inventory
Dewatered Stream Information
TMDL listings

Part II. Environmental Review**1. Environmental Impact Checklist:**

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: The source is groundwater. There is not expected to be immediate impacts to surface water in the area from the use of this well.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: The proposed use should have no significant impact on water quality issues in the area.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: The applicant submitted an aquifer test that showed the zone of influence for the well to be approximately 7,100 feet with all wells in that radius experiencing less the .5 feet of draw down after extended use. It's the applicant's assertion that there will be no significant impacts to the operation of existing wells as a result of this project. The use of this well is not expected to impact surface waters in the area.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: The diversion works will include a 32 foot deep well with a 5 HP pump, pumping up to 60 gallons per minute. The well was constructed according to the Department of Environmental Quality and Board of Well Contractor standards. The water is then delivered to the municipality through the existing infrastructure.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: The point of diversion is in the town of Worden. There is not expected to be impacts to endangered or threatened species due to the construction or operation of this project.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: The project area is not near existing wetlands, so there should be no significant impacts to wetlands from the project.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: There will be no ponds built or altered as part of this project. There should be no impacts to wildlife, waterfowl or fisheries as a result of this project.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: There is not expected to be degradation of soil quality, alteration of soil stability or saline seep problems as a result of this use of water.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: The well is within the town of Worden and as such is being built on property that already has experienced development in the past. The Ballantine-Worden Water & Sewer District is expected to take an active roll in the control of noxious weeds around this project area.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: There is not expected to be any significant impacts on air quality due to this project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: The well is within the town of Worden and as such is being built on property that already has experienced development in the past. There is not expected to be degradation of existing archeological or historical sites as a result of this project.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: As more development occurs in this area there will be increased pressure and competition between users for the limited ground water resources.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: The proposed project is not inconsistent with locally adopted environmental plans or goals.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: There is not expected to be any impacts on recreational and wilderness resources or access as a result of this project.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: Because this will be part of a municipal water supply that is governed by the DEQ and managed by a water and sewer district the water supplied by this well may be a great health resource for the residents of Ballantine and Worden. It's expected this will have a positive impact on human health in that area.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: None to report.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: The more development that occurs in this area the more competition and pressure there will be on the aquifer to meet those needs.

Cumulative Impacts: This project, existing and future septic tanks, future and existing exempt water rights such as ground water certificates and the development of irrigated land for housing all have a cumulative and irreversible impact on the ground water in this area and any surface water that is connected to it.

3. ***Describe any mitigation/stipulation measures:*** The applicant is aware that they would be required to cease using water if the use of the water is adversely impacting existing water rights.
4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The proposed activity is reasonable, and is well within accepted practices for this area.

The no action alternative may force the Ballantine-Worden Water & Sewer District to develop a different source of water to meet their municipal needs or require them to implement conservation measures that will reduce their water demands.

PART III. Conclusion

1. ***Preferred Alternative:*** To issue the permit and to encourage the applicant to make every reasonable conservation effort to minimize impacts and to conserve water in the future.
2. ***Comments and Responses:*** None to report.
3. ***Finding:***
Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were identified. No EIS is required.

Name of person(s) responsible for preparation of EA:

Name: Tim Lewis

Title: Water Resource Specialist

Date: 03/14/2007